

APPENDIX A
PARTIES SUBMITTING COMMENTS, RELY COMMENTS, PETITIONS AND
RESPONSES TO PETITIONS

Commenting Parties

1. Advanced Television Systems Committee
2. The Association for Maximum Service Television, Inc., the National Association of Broadcasters, and the Association for Local Television Stations, Inc. (filing jointly)
3. The Consumer Electronics Association
4. Florida Consumer Action Network
5. Massachusetts Consumers' Coalition
6. Motorola, Inc.
7. Paxson Communications Corporation

Replying Parties

1. The Association for Maximum Service Television, Inc., the National Association of Broadcasters and the Association for Local Television Stations, Inc. (filing jointly)
2. Thomson Multimedia, Inc.

Petition for Reconsideration

1. The Association for Maximum Service Television, Inc., the National Association of Broadcasters, and the Association for Local Television Stations, Inc. (filing jointly)
2. The Consumer Electronics Association ("Petition for Clarification and Reconsideration")
3. Thomson Multimedia, Inc. (titled "Petition for Partial Reconsideration")

Responses to Petition for Reconsideration

1. The Association for Maximum Service Television, Inc., the National Association of Broadcasters, and the Association for Local Television Stations, Inc. (filing jointly, "Opposition to Petition for Reconsideration")
2. The Consumer Electronics Association ("Opposition to the Petition for Reconsideration filed By MSTV/NAB/ALTV")

APPENDIX B RULE CHANGES

Part 15 of Title 47 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 15 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 303, 304, 307, and 554A.

2. Section 15.117 of the rules is amended by revising paragraph (a), adding new paragraphs (h) and (i) and re-designating the existing paragraph (h) as paragraph (j) to read as follows:

§ 15.117 TV broadcast receivers.

(a) All TV broadcast receivers shipped in interstate commerce or imported into the United States, for sale or resale to the public, shall comply with the provisions of this section, except that paragraphs (f) and (g) shall not apply to the features of such sets that provide for reception of digital television signals. The reference in this section to TV broadcast receivers also includes devices, such as TV interface devices and set-top devices that are intended to provide audio-video signals to a video monitor, that incorporate the tuner portion of a TV broadcast receiver and that are equipped with an antenna or antenna terminals that can be used for off-the-air reception of TV broadcast signals, as authorized under part 73 of this chapter.

(h) Digital television reception capability. TV broadcast receivers are required only to provide useable picture and sound commensurate with their video and audio capabilities when receiving digital television signals.

(i) Digital television reception capability implementation schedule. (1) Responsible parties, as defined in Section 2.909 of this chapter, are required to equip new TV broadcast receivers that are shipped in interstate commerce or imported from any foreign country into the United States and for which they are responsible to comply with the provisions of this section in accordance with the following schedule:

- Receivers with screen sizes 36" and above- 50% of all of a responsible party's units must include DTV tuners effective July 1, 2004; 100% of such units must include DTV tuners effective July 1, 2005
- Receivers with screen sizes 25" to 36"- 50% of all of a responsible party's units must include DTV tuners effective July 1, 2005; 100% of such units must include DTV tuners effective July 1, 2006
- Receivers with screen sizes 13" to 24"- 100% of all such units must include DTV tuners effective July 1, 2007
- Other devices (videocassette recorders (VCRs), digital video disk and digital versatile disk (DVD) players/recorders, etc.) that receive television signals- 100% of all such units must include DTV tuners effective July 1, 2007.

(2) For purposes of this implementation schedule, screen sizes are to be measured diagonally across the picture viewing area. The requirement for equipping new TV broadcast receivers with DTV reception capability does not apply to units with integrated tuners/displays that have screen sizes measuring less than 7.8 inches vertically, *i.e.*, the vertical measurement of a screen in the

4:3 aspect ratio that measures 13" diagonally across the picture viewing area.

(3) Responsible parties may include combinations of DTV monitors and set-top DTV tuners in meeting the required percentages of units with a DTV tuner if such combinations are marketed together with a single price.

(j) ***

Part 73 of Title 47 of the Code of Federal Regulations is amended as follows:

3. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 334, 336

4. Section 73.682, paragraph (d) is amended by revising it to read as follows:

§ 73.682 TV transmission standards.

* * * * *

(d) *Digital broadcast television transmission standard.* Transmission of digital broadcast television (DTV) signals shall comply with the standards for such transmissions set for in Advanced Television Systems Committee (ATSC) Doc. A/52 ("ATSC Standard Audio Compression (AC-3), 20 Dec '95") and ATSC Doc. A/53B ("ATSC Digital Television Standard, 7 Aug '01, except for Section 5.1.2 ("Compression format constraints") of Annex A ("Video Systems Characteristics") and the phrase "see Table 3" in Section 5.1.1 Table 2 and Section 5.1.2 Table 4. Although not incorporated herein by reference, licensees may also consult ATSC Doc. A/54 (Guide to Use of the ATSC Digital Television Standard, 4 Oct '95") and ATSC Doc. A/65 (Program System and Information Protocol (PSIP) Standard, 23 Dec '97) for guidance. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C.(a) and 1 CFR part 51. Copies may be inspected at the Federal Communications Commission, 445 12th St., SW, Washington, DC 20554 or at the Office of the Federal Register, 800 N. Capitol St., NW, Washington, DC. Copies of ATSC A/52, A/53, A/53, and A/65 can be obtained from the Commission's contract copier or from the Advanced Television Systems Committee, 1750 K St., NW, Washington, DC 20006. They are also available in their entirety on the Internet at <http://www.atsc.org>.

APPENDIX C

FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA),¹⁰² an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Report and Order and Further Notice of Proposed Rule Making* in MM Docket No. 00-39 (*Report and Order/Further Notice*).¹⁰³ The Commission sought written public comment on several issues concerning the transition to digital television (DTV), including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.¹⁰⁴

A. Need for, and Objectives of, the Report and Order:

Beginning in 1987, the Commission undertook to bring the most up-to-date technology to broadcast television. That resulted in several Commission decisions including those adopting a digital television (DTV) standard, DTV service rules, and a Table of DTV Allotments. The Table of DTV Allotments provides each existing television broadcaster with a second channel on which to operate a DTV station for the transition period after which one of its channels will revert to the government for use in other services. The transition deadline established by Congress is December 31, 2006. The Commission is permitted to extend that deadline on a market-by-market basis if more than 15 percent of viewers will be left without service from 1) a digital television receiver; 2) an analog television receiver equipped with a digital/analog converter; or 3) a multi-channel video provider that carries local broadcast stations. The Commission has determined that a requirement to include DTV reception capability in new television sets is necessary due to the lack of progress by the market in including DTV reception capability in new television receivers. In particular, the Commission is concerned that continued marketing of analog-only TV sets can only serve to delay the transition. In order for the DTV transition to move forward towards the year 2006 target completion date established by Congress, or thereafter as close to that date as possible, receivers with DTV capability need to be on the market in quantity and at reasonable prices very soon.

Since it was adopted by the Commission in 1996, the DTV transmission standard has been updated by its developers to include new features and to improve several aspects of its performance. The rules need to be revised to allow television stations to implement these new features and improvements.

¹⁰² See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

¹⁰³ *Report and Order and Further Notice of Proposed Rule Making* in MM Docket No. 00-39, 16 FCC Rcd 5946 (2001).

¹⁰⁴ See 5 U.S.C. § 604.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA:

No comments were filed in response to the IRFA.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply:

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.¹⁰⁵ The RFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹⁰⁶ In addition, the term "small business" has the same meaning as the term "small business concern" under section 3 of the Small Business Act.¹⁰⁷ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹⁰⁸

Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the [SBA] and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." A "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."¹⁰⁹ Nationwide, as of 1992, there were approximately 275,801 small organizations.¹¹⁰ "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts with a population of less than 50,000."¹¹¹ As of 1992, there were approximately 85,006 local governments in the United States.¹¹² This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.¹¹³ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities.

¹⁰⁵ 5 U.S.C. § 603(b)(3).

¹⁰⁶ *Id.* § 601(6).

¹⁰⁷ *Id.* § 601(3).

¹⁰⁸ 15 U.S.C. § 632.

¹⁰⁹ 5 U.S.C. § 601(4).

¹¹⁰ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

¹¹¹ 5 U.S.C. § 601(5).

¹¹² U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

¹¹³ *Id.*

Rules adopted in this proceeding will apply to manufacturers of television transmitting and receiving equipment and to television stations. The SBA has developed a definition of small entity for manufacturers of household audio and video equipment (NAICS Codes 334310 and 334220). This includes all such companies employing 750 or fewer employees. The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment used by consumers, as compared to industrial use by television licensees and related businesses. Therefore, we will utilize the SBA definition applicable to manufacturers of Household Audio and Visual Equipment. According to the SBA's regulations, a household audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.¹¹⁴ Census Bureau data indicate that there are 410 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 386 of these firms have fewer than 500 employees and would be classified as small entities.¹¹⁵ The remaining 24 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. Furthermore, the Census Bureau category is very broad and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment, and particularly television receivers, for consumers or how many are independently owned and operated. We conclude that there are approximately 386 small manufacturers of television equipment for television station and/or consumer/ household use but, in any even, no more than 410 are small entities.

The SBA defines small television broadcasting stations as television broadcasting stations with \$10.5 million or less in annual receipts.¹¹⁶ According to Commission staff review of the BIA Publications, Inc., Master Access Television Analyzer Database, fewer than 800 commercial TV broadcast stations (65%) subject to our proposal have revenues of less than \$10.5 million dollars.

We note, however, that under SBA's definition, revenues of affiliates that are not television stations should be aggregated with the television station revenues in determining whether a concern is small. Therefore, our estimate may overstate the number of small entities since the revenue figure on which it is based does not include or aggregate revenues from non-television affiliated companies. It would appear that there will be no more than 800 entities affected.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements:

The actions taken in the Second Report and Order and Second Memorandum Opinion and Order impose no reporting or recordkeeping requirements on television broadcast stations, large or small, or on manufacturers of television transmitting or receiving equipment, large or small. The only compliance burden adopted in this Second Report and Order and Second Memorandum Opinion and Order is the requirement that new television receivers be capable of tuning over-the-

¹¹⁴ 13 CFR § 121.201, (NAICS Codes 334310 and 334220).

¹¹⁵ U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3571, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

¹¹⁶ 13 C.F.R. § 121.201 (NAICS Code 513120)

air DTV signals, which is described in Section E, *infra*.¹¹⁷

E. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered:

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.¹¹⁸

The Commission recognizes that requiring DTV reception capability in new television receivers that action will pose new burdens on consumer electronics manufacturers, especially in the initial period when production volumes are relatively low. It further recognizes that the cost considerations associated with DTV reception capability are such that it would not be economically feasible at this point in time to include DTV capability in smaller screen receivers. However, as production increases, the price and size of the components needed for DTV reception will decline substantially, so that the incremental cost of including that capability in TV receivers will eventually become low.

The plan for implementing the DTV tuner requirement adopted in the Second Report and Order and Second Memorandum Opinion and Order is designed to be as simple and inexpensive to manufacturers as possible, including any small entities. This plan will minimize the impact on receiver manufacturers by phasing the requirement in over time. By applying the requirement first to large screen receivers, some models of which now already include an integrated DTV tuner, the plan will provide time for manufacturers to develop the economic efficiencies needed to produce TV sets with DTV tuners at lower cost. Over time the percentage of units that will have to have DTV reception capability will increase and the requirement would also be extended to smaller screen units in the same incremental manner. To minimize the impact on costs to manufacturers, receivers will only be required to have the capability to receive and decode over-the-air DTV signals. Thus, TV sets subject to the requirement will only have to provide useable picture and sound commensurate with their video and sound capabilities when receiving any of the recognized ATSC video formats; there is no requirement for full HDTV capability.

While extending the phase in period beyond July 1, 2007,¹¹⁹ would have provided additional time for manufacturers to develop cost reductions, the Commission found that imposing the requirement on all receivers by this date was necessary in order to be consistent with the statutory specification of this date as the target for completing the DTV transition. The Commission also

¹¹⁷ See also para. 42, *supra*, describing receiver cost/price increases.

¹¹⁸ 5 U.S.C. § 603(c).

¹¹⁹ See para. 40, *supra*, describing the implementation schedule for the DTV tuner requirement.

chose not to adopt an alternative that would have based the measure of compliance on the percentage of models that a manufacturer produces with DTV tuners. The plan adopted bases the measure of compliance on a manufacturer's total production of TV receivers. However, the Commission did allow manufacturers to include set-top DTV tuners marketed together with a DTV-ready receiver in the number of units that count towards meeting this requirement.

The Commission's action to update the DTV transmission standard to reflect the most recent version that has been issued by the Advanced Television Systems Committee is expected to have no adverse on any small entity. In this regard, the changes in the most recent version are all backwards compatible with the specifications of the version of the standard that was previously adopted and thereby with the capabilities of existing DTV transmission and receiving equipment.

As noted, we received comments asking, *inter alia*, that requirements we adopt be phased in more quickly,¹²⁰ and we chose instead to adopt the phase in schedule described. We believe that rejecting the alternative of a quicker transition will assist those manufacturers that are also small entities.

F. Report to Congress

The Commission shall send a copy of the Second Report and Order and Second Memorandum Opinion and Order in MM Docket No. 00-39, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A). In addition, the Commission shall send a copy of the Second Report and Order and Second Memorandum Opinion and Order in MM Docket No. 00-39, including the FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Second Report and Order and Second Memorandum Opinion and Order in MM Docket No. 00-39 and FRFA (or summaries thereof) will also be published in the Federal Register. *See* 5 U.S.C. § 604(b).

¹²⁰ *See* paras. 11 and 13, *supra*.

SEPARATE STATEMENT OF CHAIRMAN MICHAEL K. POWELL*In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television – MM Docket No. 00-39*

Every year, 25 million analog sets are sold in this country, their purchasers blissfully unaware that their new sets come with a government-mandated expiration date. Someday, analog broadcasting will cease. When that time comes, consumers will expect their television sets to go on working in the digital world just as they do today. This includes the ability to receive broadcast signals. Indeed, the expectation that TV sets receive broadcast signals is so ingrained that consumers simply assume this functionality is incorporated into their television set. That is what today's *Order* is all about.

There are approximately 81 million television sets in the U.S. (over 30% of the total) that are not connected to any subscription video service and rely solely on free, over-the-air broadcasting. Of those sets that rely on over-the-air service, about 46.5 million are in broadcast-only homes and 34.5 million are in homes that subscribe to a multichannel video programming service. Thus, over-the-air tuners affect tens of millions of consumers.

The Consumer Electronics Association ("CEA" or "Trade Association") has been vehemently opposed to phasing in DTV tuners in television sets. The Trade Association argues that those who want to watch over-the-air digital broadcasting should be required to purchase an external set-top box. This would be a far more expensive proposition for consumers, given that these boxes currently cost about \$500. It is incredible that CEA supports an alternative that would cost consumers 150% more than CEA's own cost projections for the DTV tuner (\$500 for the set top box vs. \$200 for the tuner). If the Trade Association's concern about the cost of integrated tuners is sincere, one wonders why they would suggest a solution that would cost consumers more than twice as much. Moreover, this is the same group that insists in other contexts -- e.g., the need for "plug and play" sets -- that consumers do not want a set-top box and will not tolerate such an inconvenience. It is odd that they can be so solicitous of consumer expectations in one context and so tone deaf to them here.

Furthermore, CEA's claim that a tuner requirement would be an unreasonable burden on television manufacturers is refuted by the willingness of Thomson and Zenith to voluntarily incorporate DTV tuners on a phased-in basis. In fact, Thomson is the leading television and digital satellite receiver manufacturer in the United States selling each year more than 4 million televisions and 2 million digital satellite receivers. It strains credulity to believe that either of these companies would voluntarily agree to a course of action likely to result in the consequences suggested by the Trade Association. I applaud Zenith and Thompson for their commitment to the DTV transition.

We recognize that a DTV tuner will initially add costs, but CEA's exclusive focus

on this incremental cost ignores the critical functionality the tuner adds to the TV set. This *Order* simply gives consumers what they receive today when they buy a box with pictures that claims to be a TV set. The tuner is what makes *that* box a television set. A true TV may cost a small amount more than a monitor, but the consumer is getting much more capability. Imagine tuning in to an emergency broadcast of an impending hurricane on an HDTV monitor. What is that worth to consumers?

Furthermore, we are confident that economies and efficiencies of scale will drive these costs down. Historical trends demonstrate this fact, which CEA inexplicably ignores. Ironically, CEA, in its opposition to the 1962 All Channel Receiver Act, claimed the UHF requirement would increase the cost of television sets by 14%. In fact, set prices actually *declined* following passage of the legislation.

Price sensitivity led us to phase in the tuner requirement over a five year period. Initially it will only apply to the largest sets, where the price impact would be the lowest. In fact, the prices of these large sets have been declining at a rate of \$100 to \$800 per year, so the additional cost of the DTV tuner may be partially or completely offset by the general price decline. Most projections are within a general range, from "about the same as an analog tuner" by the time a requirement would apply to small-screen TVs (Zenith), to \$16 by 2006 (Arthur D. Little), to \$50 by 2006 (Motorola), to \$75 by 2007-2008 (Thomson). CEA, by contrast, declares that DTV tuners will retain a \$200 premium "for the foreseeable future." Although a precise estimate of future cost is difficult, it is not difficult to discern which projections are within a zone of reasonableness and which is hyperbole.

Ultimately, the DTV transition will shift into high gear when three factors come together: (1) a critical mass of compelling digital content; (2) distribution of that content to consumers; and (3) reception equipment in consumers' hands. We have been working on these issues through our voluntary call to action and through Commission proceedings such as the broadcast copy protection *NPRM* we initiate today. Today's decision promotes the availability of reception equipment, without which the first two factors are meaningless. We readily admit that there are additional steps to take, such as the development of "plug and play" sets for those cable subscribers who do not want to use a set-top box. But simply because there is more work to be done does not mean that we should defer the progress we can make today.

In the end, we have to make a judgment about what is in consumers' best interest; not in a vacuum, not in a hypothetical marketplace, but in the real world. The All Channel Receiver Act and the DTV transition are national commitments in which the FCC must play a prominent role. I support today's action.

SEPARATE STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

Re: Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39 (adopted August 8, 2002)

Today's decision is a difficult balancing act between the need to continue to promote the DTV transition and a desire to protect consumers from excessive price increases for television sets. In addition, our decision involves significant regulatory intervention in the marketplace, something that I generally do not advocate because it can distort competition and drive up prices for consumers. Nevertheless, I support this decision for the following reasons: 1) the transition from analog to digital television is statutorily mandated and is not driven by market forces; 2) without the mass availability of television sets that can receive over-the air digital signals the transition remains stalled; 3) the phase-out of analog only television sets from the market gives consumers access to digital broadcast signals during the transition and protects consumers from disruption of service at the end of the transition; and 4) consumers necessarily will face additional costs as a result of the transition and it is our job to mitigate those costs to the extent possible.

The transition to digital has never been a marketplace transition, but one mandated by Congress. Congress set a target date of December 31, 2006 for the return of the spectrum used by broadcasters for their analog channel, unless 85% of homes in a market cannot receive local digital broadcast television signals. Until such time, the spectrum that is currently used for analog channels cannot be made available for public safety and other wireless uses. Yet, I don't believe we will reach 85% of homes if analog only sets continue to be introduced into the market and television sets that can receive over-the-air digital signals are not widely available. Fewer than 16% of the DTV ready receivers sold in 2001 had the capability to receive over-the-air digital signals (through a set-top box or an integrated tuner). This represents only 0.2% of television households. There also has been little support from the consumer electronics industry as a whole for a voluntary inclusion of DTV tuners in television sets. Thus, market forces alone are not providing consumers with access to digital signals and it is therefore appropriate and indeed necessary at this time for the Commission to step in.

Moreover, consumers expect to receive over-the-air signals on the television sets that they purchase – whether it is the receipt of digital signals during the transition, or the receipt of any broadcast signal after the transition is over. Adopting a tuner requirement will ensure that consumer expectations are met and will limit the number of new sets being purchased today that will become obsolete at the end of the transition. Despite the increasing proliferation of cable television and direct broadcast satellite service, a significant number of American households continue to rely on over-the-air transmissions as their sole source of television programming. Even households subscribing to a MVPD frequently rely on over-the-air transmissions on one or more of their receivers. In fact, over 30% of television sets in the U.S. (81 million) are not connected to any MVPD service and receive all broadcast signals over-the-air. Furthermore, unless cable and DBS carriage of digital broadcast signals increases significantly, a digital tuner may be the only

access an MVPD household has to many digital broadcast services during the transition.

I recognize that consumers necessarily will face additional costs as a result of the transition and it is our job to mitigate those costs to the extent possible. I believe that the five year phase in approach adopted by the Commission today will mitigate such concerns and drive down the costs of digital television equipment more quickly. The incremental costs in the larger sets at the earlier stages will make up a relatively small portion of the price of the set. Market efficiencies will drive the price of tuners down so that by the time tuners are required for smaller television sets, the costs will have greatly decreased. Furthermore, the price of digital television sets has been declining steadily (according to one consumer electronics manufacturer, at a rate of approximately \$100 to \$800 per year for the large screen sets), which could offset any increased costs associated with inclusion of a DTV tuner. Imposing a tuner mandate also will ensure that consumer electronic manufacturers can compete on a level playing field such that the cost structure will be the same for all, and the increased volumes will drive down the costs for the benefit of all.

Today, we are taking a step forward in the digital transition, but it is one of many steps that must be taken. The Commission also has been considering copyright, "plug and play" cable compatibility, and must-carry issues. I do not believe, however, that we should be at a standstill until all these issues are resolved at once. Such inaction now will only serve to delay the transition, rather than act as a catalyst for advancing the transition.

I also am pleased that we will address inclusion of PSIP as a mandatory part of the standard in the next DTV periodic review. I am particularly concerned about whether PSIP is necessary for the use of V-chip technology and I look forward to continuing the dialogue on this issue.

SEPARATE STATEMENT OF COMMISSIONER MICHAEL J. COPPS

Re: In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion To Digital Television, MB Docket No.00-39

This second item of the day reiterates the commitment of this Commission to accelerate the country's transition to digital television. I support the item because I believe it is a necessary step toward realizing our statutory obligations with regard to DTV.

Let me say at the outset that I am altogether aware of the concern that has been expressed over the initial impact a DTV tuner requirement could have on consumer prices. Far from turning a blind eye to valid consumer concerns by supporting this item, I believe that the action that we take today will make DTV sets affordable for all consumers more quickly than would be possible without today's Commission action. History indicates, and some of the major manufacturers agree, that the costs of incorporating DTV tuners into televisions set should fall fairly rapidly as **all** sets include these tuners. In addition, the five year phase-in schedule does not require the smallest and least expensive sets to include tuners until 2007, by which time the cost of this technology will no doubt be dramatically reduced. So the phased-in requirement we adopt today, rather than increasing the costs of sets, should significantly reduce the costs of DTV technology, which we hope and expect will ameliorate what might otherwise be significant consumer "sticker shock." Additionally, those of us who purchase new sets between now and 2007 won't have to go out right after 2007, when these relatively new receivers are still performing well, and buy another set in order to receive digital programming. That would be sticker shock, too.

There is no question that DTV is the wave of the future: Congress has mandated the return of analog spectrum and the transition to digital broadcasting; this Commission and its Chairman are committed to moving the transition forward; and there are already some 400 stations across the country broadcasting digital signals. But the high price and scarcity of DTV-capable receivers that are on the market now are not consistent with realizing the Congressional goal of transitioning to digital television at such time as 85% of homes have digital reception capability. Each time a consumer purchases an analog-only set, we move further from reaching that 85% and further away from the Congressional objective.

The acknowledgement by some manufacturers that a DTV tuner phase-in requirement such as the one established in the Order is reasonable and doable is a great boon to our efforts here. In addition, the rolling phase-in requirement provides manufacturers with the flexibility to reach the goal post on a faster schedule. Although manufacturers will not be **required** to fully complete the phase-in until 2007, there is nothing to prevent them from taking advantage of manufacturing, technological, or other advances that might arise over the course of the schedule that would allow manufacturers to incorporate DTV tuners into more sets sooner.

The bottom line is that we must get the DTV transition back on track. I believe this *Order* is a good step in the right direction.

Finally, I wish to emphasize that this *Order* is by no means the end of the process. With some 70% of U.S. households subscribing to cable television services, we must quickly address cable compatibility issues for the digital transition to succeed. Ideally a solution on those issues would track the time-frames established in today's *Order*. Consumers deserve, and must have, that kind of certainty. I understand that, from a technical standpoint, this may be a bit farther from resolution than the digital broadcast tuner. But I hope the players can speed up their progress on the cable compatibility issues, and I look forward to working with my colleagues, the industry, and all interested stakeholders to resolve.

DISSENTING STATEMENT OF COMMISSIONER KEVIN J. MARTIN

Re: Review of the Commission's Rules and Policies Affecting the Conversion To Digital Television, Second Report and Order and Second Memorandum Opinion and Order, MM Docket No. 00-39, Adopted August 8, 2002

First, I commend the Chairman for bringing this tough issue to a vote. As I have said previously, I believe it is extremely important for the Commission to resolve outstanding DTV-related issues quickly so that affected industries and consumers know the rules of the road. While I believe the costs of this isolated proposal outweigh the benefits, as I explain below, I appreciate that with every DTV-related decision this Commission makes, we further clarify those rules of the road. Indeed, I would have gone farther. I firmly believe that such clarity is what is needed to spur the digital transition, and I encourage the Commission to continue to actively resolve outstanding issues.

Generally, I prefer market-based forces to government regulation, and I am particularly cautious when regulation imposes a cost to consumers or requires consumers to purchase a product they may not use. In such situations, I believe the better course of action usually is to refrain from regulation and instead to provide consumers with a choice. If government intervention is necessary, however, I believe it must be clear that the benefits outweigh the costs.

Currently, consumers can choose whether to spend the extra money to purchase a television that includes a digital tuner. This Order sets out deadlines by when television manufacturers *must* include digital tuners, so that all but the smallest televisions will be able to receive digital broadcast signals "over the air." Today, however, few consumers receive their video programming only through over the air broadcasting. Instead, the vast majority of consumers receive broadcast programming through their cable or satellite provider. Even as the transition to digital is made, these consumers will probably prefer to continue to receive their video programming through cable or satellite. Thus, taking action on digital broadcast tuners alone, as we do to today, confers a real benefit only on the relatively small percentage of consumers (approximately fifteen percent) who do not rely on cable or satellite for broadcast reception. The costs, however, will be borne by every consumer who buys a television. I therefore fear that the costs of this requirement, as an isolated action, exceed the benefits, and I am not persuaded that it is the right step.

On the other hand, if we were to resolve the digital cable and broadcast tuner issues together, we would create a significantly greater benefit for consumers with relatively little additional cost. It is my understanding that manufacturers can integrate digital broadcast and cable reception capabilities, thereby incorporating these functions into televisions for approximately the same cost as the digital broadcast tuner alone. The value of being able to view digital programming, however, would accrue not just to consumers who rely on over-the-air broadcast, but to the approximately 70 percent of consumers who access their programming (including broadcast) via cable. Indeed, many of those consumers would have additional savings as they would no longer need to rent a set-top or "converter" box. Thus, if we were to ensure equipment functionality and

interoperability for all digital cable systems by requiring the cable industry to adopt a single standard, then manufacturers could build "digital cable ready" sets that also incorporate broadcast tuners. This action would impose approximately the same cost on consumers as the Order does today, yet would enable significantly more consumers to receive more digital programming. And if we were also to resolve outstanding cable carriage issues, we could further increase the amount of digital broadcast programming these consumers could access.

I nevertheless am hopeful that, in addition to concluding this proceeding today, we will resolve outstanding issues relating to cable carriage and cable compatibility in the very near future. I believe that such steps will facilitate and accelerate this country's transition to digital television.